MICHIGAN ANNUAL REGIONALTRAUMA REPORT-2020

REGION 3

Statutory Reference: R325.132 Rule 8 (3) (a) At least quarterly, a region shall submit evidence of ongoing activity, such as meeting notices, minutes to the department. Annually the regional trauma advisory council shall file a report with the department which describes progress toward system development, demonstrates ongoing activity, and includes evidence that members of the regional trauma advisory council are currently involved in trauma care.

OVERVIEW AND ASSESSMENT OF RESOURCES:

Region 3 is located on the eastern side of the state. The region is comprised of fourteen counties: Alcona, Arenac, Bay, Genesee, Gladwin, Huron, Iosco, Lapeer, Midland, Ogemaw, Oscoda, Saginaw, Sanilac, and Tuscola. The region has twenty hospitals, ten health departments, and twelve medical control authorities that oversee 126 licensed life support agencies ranging from medical first responder (MFR) through advanced life support (ALS) levels along with two rotary-wing air ambulances. Region 3 is a highly diverse area comprised of small rural farming communities to medium sized cities. The United States Census Bureau estimates the population of the region to be approximately 1.1 million residents (2019). There are four urban areas within the region: Bay City, Flint, Midland and Saginaw. There are two international airports with a lengthy shoreline of Lake Huron that shares an international border with Canada. The region is home to several colleges and universities such as the University of Michigan-Flint, Saginaw Valley State University and Delta College. The largest employers include the Dow Chemical company, General Motors, and many of the healthcare systems throughout the region. Region 3 is also home to Frankenmuth, "Michigan's Little Bavaria". The tourist destination has approximately 3 million visitors per year with its many festivals and attractions.

Medical Control Authorities

MCA Name	Medical Director
Alcona County Northeast MI MCA	Dr. Paul Bucchi, MD
Arenac County MCA	Dr. Bobby May, DO
Bay County MCA	Dr. Brad Blaker, DO
Genesee County MCA	Bruce Trevithick
Huron County MCA	Dr. James Sutton, DO
losco County MCA	Dr. Bobby May, DO
Lapeer County MCA	Dr. Joseph Zacjkowski, MD
Midland/Gladwin County MCA	Dr. Danny Greig, MD
Ogemaw County MCA	Dr. Paul Bucchi, MD
Oscoda County North Central MCA	Dr. Shaun Ramsey, DO
Saginaw/Tuscola MCA	Dr. Noel Wagner, MD
Sanilac County MCA	Dr. William Starbird, MD

Designation Status of Facilities in Region:

Facility Name	Designated Yes or No	Level of Designation
Hurley Medical Center-Flint	Yes	I Adult II Pediatric
Ascension St. Mary's-Saginaw	Yes	II
Ascension Genesys Medical Center-Grand Blanc	Yes	н
Covenant Medical Center-Saginaw	Yes	II Adult

McLaren Lapeer Region-Lapeer	Yes	II
MidMichigan Medical Center-Midland	Yes	II
McLaren Bay Region-Bay City	Yes	li li
McLaren Flint	Yes	- 111
Ascension St. Joseph-Tawas City	Yes	IV
Ascension St. Mary's -Standish	Yes	IV
Deckerville Community Hospital-Deckerville	Yes	IV
Harbor Beach Community Hospital-Harbor Beach	Yes	IV
Hills and Dales General Hospital-Cass City	Yes	IV
Marlette Regional Hospital-Marlette	Yes	IV
McKenzie Memorial Hospital-Sandusky	Yes	IV
McLaren Caro Region-Caro	Yes	IV
Scheurer Hospital-Pigeon	Yes	IV
McLaren Thumb Region-Bad Axe	No	IV Provisional
MidMichigan Medical Center-Gladwin	No	IV Provisional
MidMichigan Medical Center-West Branch	No	IV Provisional

Governance:

Regional Trauma Network (RTN) Board

	Name and Title
Chairperson	Eric Snidersich BS, EMT-P Assistant Director EMS
Vice Chairperson	Dr. Danny Greig, MD Medical Director

Regional Trauma Advisory Council (RTAC)

	Name and Title	
Chairperson	Dr. Leo Mercer, MD Trauma Medical Director	
Vice Chairperson	Dr. Oveys Mansuri, MD Trauma Surgery	Dalling a sin

Regional Professional Standards Review Organization

	Name and Title
Chairperson	Dr. Leo mercer, MD Trauma Medical Director
Vice Chairperson	Dr. Gul Sachwani-Daswani, MD Pediatric Trauma Medical Director

Governance Activity Report: (Describe activities - 125 words each section)

- · Regional Trauma Network Board (RTN Board):
- Regional Trauma Advisory Council (RTAC):
- Regional Professional Standards Review Organization (RPSRO):
- The Region 3 Regional Trauma Network Board (RTN) is scheduled to meet quarterly immediately following the Region 3 Regional Trauma Advisory Council (RTAC) meeting.
- The Regional Trauma Advisory Council (RTAC) meets quarterly the fourth Tuesday of the month. The subcommittees Trauma Triage, Transport and Destination, Trauma Registry, Trauma Education, and Injury Prevention also meet quarterly prior to the RTAC meeting.
- The Regional Professional Standards Review Organization (RSPRO) meets quarterly
 prior to the RTAC meetings. They perform case reviews that reflect system issues and
 review both MDHHS and MTQIP trauma related data.

Work Plan Objective Progress and Highlights:

Injury Prevention

Indicator 306.2: The RTN is active within the region in the monitoring and evaluation of regional injury prevention activities and programs.

Regional Score: 2 The RTN does some minimal monitoring and evaluation of injury prevention activities and programs in the region.

Objective: The Region 3 Trauma Network will conduct a regional needs survey.

Progress: The Injury prevention Subcommittee elected new co-chairs. Many of the Injury Prevention staff have been either furloughed or have been assigned to other clinical duties

due to the COVID-19 pandemic that has slowed the progress of this objective. The Subcommittee will provide a needs survey during the next application period.

Indicator 203.5: The RTN has developed a written injury prevention plan. The injury prevention plan is data driven and targeted programs are developed based upon high injury risk areas. Specific goals with measurable objectives are incorporated into the injury prevention plan.

Regional Score: 1 There is no written plan for coordinated injury prevention programs within the region.

Objective: The Region 3 Trauma Network will request the Injury Prevention committee to draft a coordinated injury prevention plan that includes the leading causes of injury with the region.

Progress: The Injury Prevention Subcommittee has reviewed injury prevention objectives for the region. The group reviewed what programs are currently being offered by trauma centers within the region and plan to coordinate their efforts in any future activities.

Communications

Indicator 302.10: There are established procedures for EMS and trauma system communications for major EMS events or multiple jurisdiction incidents that are effectively coordinated with the overall regional response plans.

Regional Score: 3 There are written regional EMS communications procedures for major EMS events. These procedures do not involve other jurisdictions and are not coordinated with the overall regional response plans or incident management systems.

Objective: The Region 3 Trauma Network will develop a needs assessment to determine the current state of regional communication interoperability of all EMS agencies and hospitals.

Progress: It has been identified that all hospitals and most of the EMS agencies currently utilize 800 MHz radio systems which assist with system interoperability. Several of the county 911 systems within the region have coordinated their efforts so that dispatch capabilities can be transferred to another 911 dispatch center within the region should a disaster render another 911 center incapacitated.

Indicator 302.9: There is a procedure for communications among medical facilities when arranging for inter-facility transfers including contingencies for radio or telephone system failure.

Regional Score: 2 Inter-facility communication procedures are generally included in patient transfer protocols for each medical facility but there is no regional procedure.

Objective: The Region 3 Trauma Network will develop a regional communication tool for inter-facility transfers. The Trauma Triage, Transport and Destination Subcommittee will

generate a regional interfacility transport envelope to standardize interfacility transport information on a regional basis.

Progress: The region has developed an interfacility transfer tool in the form of a Regional Interfacility Checklist Envelope for both facilities and EMS agencies to improve that all appropriate patient information is sent to the receiving trauma center. These envelopes are currently being distributed by the interim Region 3 Regional Trauma Coordinator. The Region will monitor the effectiveness of this tool and assess for any necessary changes.

Infrastructure

Indicator 302.1: There is well- defined regional trauma system medical oversight integrating the needs of the trauma system with the medical oversight of the overall EMS system.

Regional Score: 3 The RTN has adopted state approved regional trauma protocols.

Objective: The RTAC will convene a committee of Region 3 representatives and regional 911 directors charged with the task of developing a regional trauma dispatch protocol that will outline procedures to ensure the appropriate level of providers are sent to trauma related incidents.

Progress: Jurisdiction and control of the 911 center lie within the individual counties and not the state of Michigan. The COVID-19 pandemic has presented additional challenges in convening representatives as many have been tasked with additional pandemic related clinical and administrative duties.

Indicator 302.2: There is a clearly defined, cooperative, and ongoing relationship between regional trauma physician leaders and the EMS system medical directors in the region.

Regional Score: 2 There is not a formally established ongoing relationship between the individual trauma medical directors and the EMS system medical directors. However, the trauma medical directors and EMS medical directors informally communicate to resolve problems and coordinate efforts.

Objective: The Region 3 Trauma Network trauma medical directors and MCA directors will have a systemin place for the evaluation of the effectiveness of online and offline medical control.

Progress: The Region 3 trauma medical directors and MCA directors actively participate in the RSPRO, RTAC and Trauma Triage, Transport and Destination Subcommittee meetings. T

Indicator 303.2: The regional trauma network plan should ensure that the number, levels, and distribution of trauma facilities are communicated to all partners and stakeholders. The RTN should develop procedures to ensure that trauma patients are transported to an appropriate facility that is prepared to provide care.

Regional Score:4 There is a regional system plan and a diversion protocol that identifies the number, levels and distribution of trauma facilities based on available data. However, the regional plan and diversion protocol is not used to make decisions about trauma facility designations.

Objective: The assigned sub-committee will develop a regionalized trauma dispatch protocol that will allow for ALS v BLS, air-ground coordination, early notification to the trauma facility, pre-arrival instructions, and other procedures necessary to ensure dispatched resources are consistent with the needs of the injured patients.

Progress: This objective has been completed. The region has developed a listing of all regional trauma centers and their capabilities including Level III Trauma Centers that have neurological and anticoagulation therapies available.

Indicator 303.1: The regional trauma plan has clearly defined the roles, resources and responsibilities of all acute care facilities treating trauma, and of facilities that provide care to specialty populations (burns, pediatrics, other).

Regional Score: 4 The regional trauma plan addresses the roles, resources and responsibilities of licensed acute care facilities and specialty care facilities.

Objective: The RTN will evaluate the effectiveness of the system and work together to implement improvements that are necessary to optimize the efficiency of patient care and transport of the injured patient.

Progress: The region has identified specialty care centers within the region including burns, pediatrics, and rehabilitation centers. The capabilities of these facilitates and resources have been communicated to stakeholders within the region.

Regional Performance Improvement

Indicator 206.1: The RTN generates data reports to evaluate and improve system performance.

Regional Score: 2 Some general trauma system information is available to stakeholders but is not consistent or regular.

Objective: The data use agreement is in place, approved and signed by the regional stakeholders.

Progress: The RSPRO has been reviewing MTQIP data for Level II, II and III Trauma Centers to look at regional trauma activity and trends. The RSPRO has also began to review the Region 3 Inventory data provided by MDHHS.

Indicator 302.6: The region has adopted mandatory regional pre-hospital triage protocols to ensure that trauma patients are transported to an appropriate trauma center based on their injuries. The triage protocols are regularly evaluated and updated to ensure acceptable and

region-defined rates of sensitivity and specificity for appropriate identification of a major trauma patient.

Regional Score: 3 Regional triage criteria are used by all pre-hospital providers. There is no current process in place for evaluation.

Objective: The Region 3 Trauma Network will begin to perform annual evaluation and analysis of system performance for the purpose of improving the care of trauma patients within the region.

Progress: The Region 3 Trauma Network has developed and implemented a Trauma Triage, Destination and Transport protocol that allows trauma patients to be transported to the appropriate level trauma center. Until recently the region has lacked the data to be able to effectively evaluate the effectiveness of this protocol. The region will strive to utilize this data to evaluate the effectiveness of this protocol.

Indicator 303.4: When injured patients arrive at a medical facility that cannot provide the appropriate level of definitive care, there is an organized and regularly monitored system to ensure the patients are expeditiously transferred to the appropriate, system defined trauma facility.

Regional Score: 2 There is a fragmented system within the region, usually event based, to monitor inter-facility transfer of trauma patients.

Objective: The Region 3 Trauma Network will begin to perform annual evaluation and analysis of system performances for the purpose of improving the care of trauma patients within the region.

Progress: The RSPRO has begun to review Region 3 inventory data provided by MDHHS such as ED dwell times to monitor for the possibility of interfacility transfer delays.

Indicator 205.2: Collected data from a variety of sources are used to review the appropriateness of all-inclusive regional trauma performance standards, from injury prevention through rehabilitation.

Regional Score: 1 There are no written, quantifiable regional system performance standards or performance improvement processes.

Objective: The Region 3 Trauma Network will begin utilizing data on Region 3 trauma incidents and perform annual evaluation and analysis of system performance for the purpose of improving the patient care of trauma patients within the region.

Progress: The region has at a minimum reviewed MTQIP data to evaluate Level I, II and III Trauma Center performance through the RPSRO as well as began to review Region 3 inventory data provided by MDHHS.

Indicator 303.4: There is a regional trauma bypass protocol that provides EMS guidance for bypassing a trauma care facility for another more appropriate trauma care facility.

Regional Score: 4 There is a regional bypass protocol that allows bypass of an acute care facility and provides guidance on what the most appropriate facility is based upon on the patient's injury.

Objective: The Region 3 Trauma Network has a regional Trauma, Triage and Destination protocol that has been developed and approved by MDHHS for use.

Progress: The Region 3 Trauma Triage and Destination protocol has been in use within the region.

Indicator 205.3: The RTN data in the state trauma registry is used to identify and evaluate regional trauma care and improve the use of resources.

Regional Score: 3 All trauma facilities in the region enter data into the state trauma registry but data are not being used to improve the system.

Objective: The Region 3 Trauma Network will begin utilizing trauma data within the region and perform an annual evaluation and analysis of system performance for the purpose of improving the patient care of trauma patients.

Progress: The RPSRO has begun reviewing the Region 3 trauma inventory data provided by MDHHS. All acute care facilities within the region are submitting their trauma data into the state trauma registry on a regular basis.

Continuum of Care

Indicator 308.1: The regional work plan addresses the integration and participation of rehabilitation services within the continuum of care for trauma patients.

Regional Score: 1 There are no written plans for the integration of rehabilitation services with the regional trauma system or with trauma centers.

Objective: The region 3 Trauma Network will establish a Rehabilitation Subcommittee charged with the task of identifying the rehabilitation services within the region and begin the process of developing policies or protocols that will begin integrating rehabilitation into the trauma system.

Progress: No action has been initiated on this indicator. This indicator has been deferred to the 2020-2023 Region 3 Workplan.

Trauma Education

Indicator 310.3,4,6: The regional trauma network establishes and ensures that appropriate levels of EMS, nursing and physician trauma training courses are provided on a regular basis.

Regional Score: 1 There are no regional trauma training guidelines for EMS personnel, nurses or physicians who routinely care for trauma patients.

Objective: The Region 3 Trauma Network will conduct a regional inventory of available trauma education programs (e.g. PHTLS, ITLS, ATLS, TNCC, ENPC) along with the creation of a mechanism to share this information with regional stakeholders.

Progress: Trauma training courses and continuing education programs are readily available across the region. The Trauma Education Subcommittee is in the process of developing a mechanism to disseminate this information to all regional stakeholders. Several different mechanisms have been discussed and will be implemented into the 2020-2023 Region 3 Workplan.

Indicator 310.10: As new protocols and treatment approaches are instituted within the regional trauma system; structured processes are in place to inform or educate all personnel of those changes in a timely manner.

Regional Score: 1 The region has no process in place to inform or educate all personnel on new protocols or treatment approaches.

Objective: The Region 3 Trauma Network will stablish minimum trauma education requirements for providers that care for trauma patients.

Progress: The Region 3 Trauma Network has initiated discussions regarding minimal standards for caregivers who routinely provide care to injured patients. Most of the EMS services within the region and acute care facilities have most of their staff trained in courses such as PHTLS, TNCC, ACTN ad ATLS. However, there is no established training guidelines for care providers within the region.

Regional Summary:

The Region 3 Trauma Network has developed and implemented a Trauma Triage, Destination and Transport protocol that allows trauma patients to be transported to the appropriate level trauma center. Until recently the region has lacked the data to be able to formally evaluate the effectiveness of this protocol. The region will strive to utilize this data to evaluate the effectiveness of this protocol. As the trauma system continues to mature, reliable trauma data is needed to be able to evaluate regional trauma system performances, injury prevention and education effectiveness and any deficiencies or gaps that may be in the region.

The Region 3 Trauma Symposium which is held annually in March routinely boasts over 300 attendees. The continued success of the trauma symposium is made possible due to the many contributions made by the trauma center staff, and stakeholders within the region. In an effort to provide the same quality that attendees have become accustomed to the decision was made to cancel the Region 3 Trauma Symposium for 2021 and resume in 2022. It was felt that there

would not be sufficient time or staffing to be able to replicate the in-person experience on a virtual platform.

To improve the continuity of care between the referring hospital, EMS provider and receiving trauma center a Regional Trauma Transfer Envelope was developed. The envelope also serves as a checklist that ensures all the needed documentation and imaging is being sent along with the patient. The goal is also to minimize variability between regional hospital trauma transfer documentation requirements. Region 3 will begin to evaluate the effectiveness of this tool and review any suggested changes that may be needed in the future.

Several standardized trauma education courses are available within Region 3 such as Advanced Trauma Life Support (ATLS), Trauma Nursing Core Course (TNCC), and Pre-Hospital Trauma Life Support (PHTLS). Many of the trauma centers within the region have specific education requirements for its own staff however there is no standardized regional requirement for trauma education. The goal of having a centralized resource for communicating trauma education offerings within the region as well as standardized trauma education for providers is currently being discussed.

Many of the trauma centers in the region have communicated increased clinical and administrative responsibilities as well as employees being furloughed due to their hospital's response to the COVID-19 pandemic. Many in person activities such as injury prevention events have been changed to virtual online events or have been modified to meet epidemic gathering restriction orders. Region 3 trauma meetings have changed from in person to virtual meetings as well.

Trauma leaders within the region continue to provide high level trauma care despite the challenge the COVID-19 pandemic has presented. Many of the trauma providers play an active role in their facilities preparedness planning and patient surge plans. Several discussions during Région 3 trauma meetings have taken place including the need for increased personal protection precautions while providing routine trauma care as well as increased penetrating trauma incidents within the urban area of the region during the COVID-19 pandemic.

Regio	nal System Evaluation in accordance with Administrative Rule Requirements:
X	Regional trauma network and committee meetings have taken place as scheduled (quarterly) in accordance with the Open Meetings Act.
X	Schedule and information regarding RTN Board and RTAC posted on the trauma website
X	Annual confirmation that members of the RTAC are currently involved in trauma care completed.
\boxtimes	All MCA's are participating in the RTN (If not what efforts have been made to address)
X	Documentation that all hospitals in the trauma network are participating in:
	☑ Regional Injury Prevention
	☑ Regional Performance Improvement
	Submission of registry data to ImageTrend
X	Regional trauma plans completed (attach copy of plan or state "in progress")
	☑ Regional Injury Prevention (In Progress)
	☑ Regional Trauma Education (In Progress)
	☑ Regional Performance Improvement (In progress)
X	Regional PI process in place; Inventory data reviewed and trends (if noted) are being monitored. PI process that includes two levels of review is place (as needed). RPRSO corresponds annually (at a minimum) with RTN regarding PI. Minutes, materials stored by RTC.
	Fric Spidersich Digitally signed by Eric Snidersich